ABSTRACT OF THE DISCLOSURE

IMAGE PROCESSING METHOD

Image processing method comprises providing an original image as a matrix of discreet picture elements, splitting the original image into n frequency channels, each channel being presented by an image matrix of the same size as the original image, detecting edges, and assembling an output (enhanced) image from the n frequency channels, the assembling taking the detected edges into account. The n frequency channels are represented by a low frequency channel and n-1 high frequency channels while splitting the original image into frequency channels, and the edge detection is performed by calculating a correlation value between processed pixel and its neighboring pixels in each of n-1 selected high channels followed by comparing the correlation value with that for the corresponding pixels in other high frequency channels and with the threshold value for this channel. Based on the results of the comparison, weighting coefficients are formed for each pixel of each of the n-1 high frequency channels, and the assembling of the output image is made by summing each pixel from the low frequency channel with all products of the corresponding (by their location in the image) pixels of n-1 high frequency channels by their weighting coefficients. The method enhances image sharpness and contrast in conjunction with simultaneous noise suppression.